Montana Board of Oil and Gas Conservation
Environmental Assessment

Operator: Balko Inc.
Well Name/Number: Jones 17-1X
Location: NE SE NE Section 17 T27N R4W
County: Pondera, **MT; Field (or Wildcat)** Pondera

Air Quality

(possible concerns)
Long drilling time: No, 3 to 4 days drilling time.
Unusually deep drilling (high horsepower rig): No, small single derrick drilling rig, about 500 HP (Estimated) to drill to 2030' TD Madison Formation.
Possible H2S gas production: Slight H2S anticipated.
In/near Class I air quality area: No not in a Class I air quality area.
Air quality permit for flaring/venting (if productive): Yes, DEQ air quality permit required under 75-2-211.

Mitigation:
_X Air quality permit (AQB review)
__ Gas plants/pipelines available for sour gas
__ Special equipment/procedures requirements
__ Other:_____
Comments: No special concerns – using small rig to drill to 2030' TD.

Water Quality

(possible concerns)
Salt/oil based mud: No, freshwater, freshwater mud system, air and/or air mist.
High water table: No high water table anticipated.
Surface drainage leads to live water: No drainages within a ½ mile radius around this location. Closest drainages are unnamed ephemeral tributaries to Pondera Coulee 7/10 of a mile to the west and 4/5 of a mile to the northeast
Water well contamination: No, water wells within a one mile radius from this location. Surface hole in this well will be drilled to 300' with freshwater and/or air. Steel surface casing will be run and cemented to surface to protect ground water. (Rule 36.22.1001), if any.
Porous/permeable soils: No, silty bentonitic soils.
Class I stream drainage: No Class I stream drainages.

Mitigation:
__ Lined reserve pit
_X Adequate surface casing
__ Berms/dykes, re-routed drainage
__ Closed mud system
__ Off-site disposal of solids/liquids (in approved facility)
__ Other: _____
Comments: 300' of surface casing cemented to surface adequate to protect freshwater zones (Rule 36.22.1001) Also, air/air mist and/or fresh water mud systems to be used.

Soils/Vegetation/Land Use

(possible concerns)
Steam crossings: No, stream crossings anticipated.
High erosion potential: No, small cut, up to 2.7' and small fill, up to 2.3', required.
Loss of soil productivity: No, location will be restored after drilling, if nonproductive. If productive unused portion of drillsite will be reclaimed.
Unusually large wellsite: No, 200'X100' location size required.
Damage to improvements: Slight, surface use on the edge of a cultivated field and grassland area.
Conflict with existing land use/values: Slight

Mitigation
__ Avoid improvements (topographic tolerance)
__ Exception location requested
_X_ Stockpile topsoil
__ Stream Crossing Permit (other agency review)
_X_ Reclaim unused part of wellsite if productive
__ Special construction methods to enhance reclamation
__ Other _____

Comments: Access will be over existing county gravel road Pondera Oil Field Lease Road. No new access road will be built into this location, will utilize existing well access road. Cuttings will be buried in and unlined earthen pit. Drilling fluids if used will be allowed to dry in the pit. Pits will be backfilled after drying. No special concerns.

Health Hazards/Noise

(possible concerns)
Proximity to public facilities/residences: Closest residence is about 1.3 miles to the west from this location. The town of Conrad, Montana is about 10 miles to the northeast from this location.
Possibility of H2S: Slight H2S anticipated.
Size of rig/length of drilling time: Small drilling rig/short 3 to 4 days drilling time.

Mitigation:
_X_ Proper BOP equipment
__ Topographic sound barriers
__ H2S contingency and/or evacuation plan
__ Special equipment/procedures requirements
__ Other:_____

Comments: Adequate surface casing and operational BOP (3,000 psi annular) should mitigate any problems. (BOP's 3,000 psig annular) Rule 36.22.1014. No concerns

Wildlife/recreation

(possible concerns)
Proximity to sensitive wildlife areas (DFWP identified): None identified.
Proximity to recreation sites: None identified.
Creation of new access to wildlife habitat: No
Conflict with game range/refuge management: No
Threatened or endangered Species: Only species identified as threatened or endangered are the Piping Plover, Grizzly Bear and the Canada Lynx. Candidate species listed is the Sprague's Pipit and the White Bark Pine, NH tracker website lists

zero (0) species of concern and two (2) potential species of concern: Brook Stickleback, and Brassy Minnow.

Mitigation:
__ Avoidance (topographic tolerance/exception)
__ Other agency review (DFWP, federal agencies, DSL)
__ Screening/fencing of pits, drillsite
__ Other:_____
Comments: Private surface cultivated and grass lands. There may be species of concern that maybe impacted by this wellsite. We ask the operator to consult with the surface owner as to what he would like done, if a species of concern is discovered at this location. The Board of Oil & Gas has no jurisdiction over private surface lands. No concerns.

Historical/Cultural/Paleontological

(possible concerns)
Proximity to known sites: None identified
Mitigation
__ avoidance (topographic tolerance, location exception)
__ other agency review (SHPO, DSL, federal agencies)
__ Other:_____
Comments: Private surface cultivated and grass lands. There may be possible historical/cultural/paleontological sites that maybe impacted by this wellsite. We ask the operator to consult with the surface owner as to his desires to preserve these sites or not, if they are found during construction of the wellsite. The Board of Oil & Gas has no jurisdiction over private surface lands. No concerns.

Social/Economic

(possible concerns)
__ Substantial effect on tax base
__ Create demand for new governmental services
__ Population increase or relocation
Comments: No concerns.

Remarks or Special Concerns for this site

Well is a 2030' Madison Formation test.

Summary: Evaluation of Impacts and Cumulative effects

No long term impacts expected. Some short term impacts will occur, but can be mitigated.

I conclude that the approval of the subject Notice of Intent to Drill (does/**does not**) constitute a major action of state government significantly affecting the quality of the human environment, and (does/**does not**) require the preparation of an environmental impact statement.

Prepared by (BOGC): /s/ John Gizicki _____
(title:) Compliance Specialist
Date: May 2, 2014

Other Persons Contacted:

_____
Montana Bureau of Mines and Geology, GWIC website_____
(Name and Agency)

Pondera County water wells._____
(subject discussed)

May 2, 2014
(date)

US Fish and Wildlife, Region 6 website
(Name and Agency)
ENDANGERED, THREATENED, PROPOSED AND CANDIDATE SPECIES
MONTANA COUNTIES, Pondera County
(subject discussed)

May 2, 2014 _____
(date)

Montana Natural Heritage Program Website (FWP)
(Name and Agency)
Heritage State Rank= S1, S2, S3, T27N R4W
(subject discussed)

May 2, 2014 _____
(date)

If location was inspected before permit approval:
Inspection date: _____
Inspector: _____
Others present during inspection: _____